

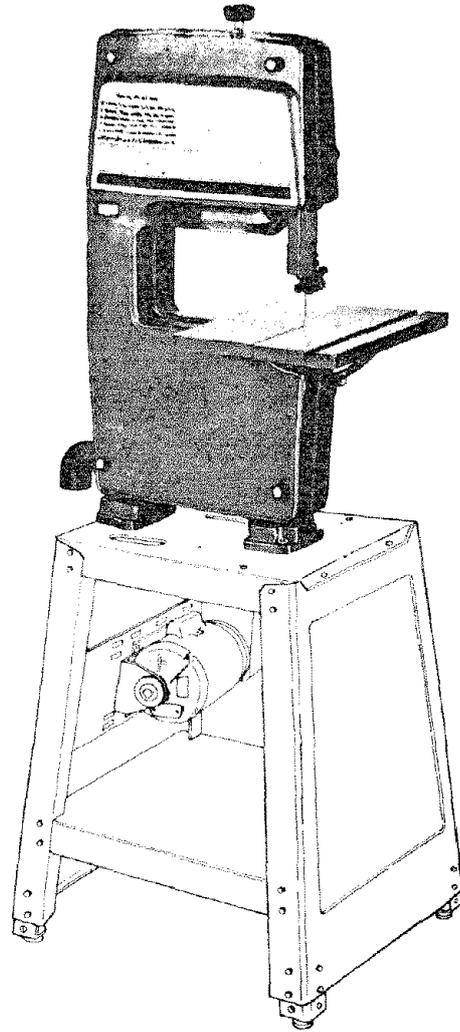
Sears

*owners
manual*

**MODEL NO.
113.24201**

CAUTION:

Read SAFETY
INSTRUCTIONS
carefully



CRAFTSMAN

***12-INCH BAND SAW/
SANDER***

*assembly
operating
repair parts*

SEARS, ROEBUCK AND CO., Chicago, IL 60684 U.S.A. and SIMPSONS-SEARS LIMITED, Toronto

POWER TOOL GUARANTEE

Craftsman power tools (or welders) are unconditionally guaranteed, for one year, to give complete satisfaction or the tool will be repaired free of charge.

This guarantee service is available through any of our stores, or service centers throughout the United States or Canada.

SEARS, ROEBUCK AND CO. • SIMPSONS-SEARS LIMITED

general safety instructions for power tools

1. KNOW YOUR POWER TOOL

Read the owner's manual carefully. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.

2. GROUND ALL TOOLS

This tool is equipped with an approved 3-conductor cord and a 3-prong grounding type plug to fit the proper grounding type receptacle. The green conductor in the cord is the grounding wire. Never connect the green wire to a live terminal.

3. KEEP GUARDS IN PLACE

and in working order.

4. REMOVE ADJUSTING KEYS AND WRENCHES

Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.

5. KEEP WORK AREA CLEAN

Cluttered areas and benches invite accidents. Floor must not be slippery due to wax or sawdust.

6. AVOID DANGEROUS ENVIRONMENT

Don't use power tools in damp or wet locations. Keep work area well lit. Provide adequate surrounding work space.

7. KEEP CHILDREN AWAY

All visitors should be kept a safe distance from work area.

8. MAKE WORKSHOP KID-PROOF

— with padlocks, master switches, or by removing starter keys.

9. DON'T FORCE TOOL

It will do the job better and safer at the rate for which it was designed.

10. USE RIGHT TOOL

Don't force tool or attachment to do a job it was not designed for.

11. WEAR PROPER APPAREL

No loose clothing, gloves, neckties or jewelry to get caught in moving parts. Rubber-soled footwear is recommended for best footing.

12. USE SAFETY GOGGLES

Safety goggles must comply with ANS Z87.1-1968.

Also use face or dust mask if cutting operation is dusty.

13. SECURE WORK

Use clamps or a vise to hold work when practical. It's safer than using your hand, frees both hands to operate tool.

14. DON'T OVERREACH

Keep proper footing and balance at all times.

15. MAINTAIN TOOLS WITH CARE

Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

16. DISCONNECT TOOLS

before servicing; when changing accessories such as blades, bits, cutters, etc.

17. AVOID ACCIDENTAL STARTING

Make sure switch is in "OFF" position before plugging in.

18. USE RECOMMENDED ACCESSORIES

Consult the owner's manual for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards.

19. NEVER STAND ON TOOL

Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.

Do not store materials above or near the tool such that it is necessary to stand on the tool to reach them.

20. CHECK DAMAGED PARTS

Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function — check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.



THIS SAFETY SEAL OF THE
POWER TOOL INSTITUTE ASSURES YOU . . .

1. That the manufacturer's power tools, including the particular tool associated with the Seal, are produced in accordance with applicable Standards For Safety of Underwriters' Laboratories and American National Standards (ANSI).

2. That compliance with applicable safety standards is assured by independent inspection and testing conducted by Underwriters' Laboratories (UL).
3. That every motorized tool is inspected under power.
4. That every tool has with it adequate instructions and a list of safety rules for the protection of the user.
5. That the tool manufacturer is a member of the Power Tool Institute and is a sponsor of the Institute's Consumer Safety Education Program.

additional safety instructions for band saw/sander

Safety is a combination of operator common sense and alertness at all times when the band saw is being used.

WARNING: FOR YOUR OWN SAFETY, DO NOT ATTEMPT TO OPERATE YOUR BAND SAW UNTIL IT IS COMPLETELY ASSEMBLED AND INSTALLED ACCORDING TO THE INSTRUCTIONS . . . AND UNTIL YOU HAVE READ AND UNDERSTAND THE FOLLOWING:

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1. General Safety Instructions for Power Tools	2
2. Getting To Know Your Band Saw/Sander	13
3. Basic Band Saw Operation	15
4. Maintenance	19

5. Stability Of Machine
The band saw must be bolted securely to a stand or work bench, in addition, if there is any tendency for the band saw to tip over or move during certain operations such as cutting long heavy boards. The band saw should be bolted to the floor.

6. Location
The band saw should be positioned so neither the operator nor a casual observer is forced to stand in line with the blade. This band saw is intended for indoor use only.

7. Protection: Eyes, Hands, Face, Ears, Body
- a. Wear safety goggles that comply with ANS Z87.1-1968, and a face shield if operation is dusty. Wear ear plugs or muffs during extended periods of operation. Do not wear gloves . . . roll long sleeves above the elbow.
 - b. Do not cut pieces of material too small to hold by hand.
 - c. Avoid awkward hand positions, where a sudden slip could cause a hand to move into the blade or the sanding belt.
 - d. Never turn your band saw "ON" before clearing the table of all Objects (tools, scraps of wood, etc.) except for the workpiece and related feed or support devices for the operation planned.
 - e. Make sure the blade runs downward toward the table in the right direction. Always adjust tracking wheels correctly so that the blade does not run off the wheels.
 - f. Always adjust tension correctly for the blade or sanding belt being used.
 - g. Always adjust the upper blade guides not more than 1/4" above your material when cutting.
 - h. When cutting a large piece of material, make sure it is supported at table height.
 - i. Hold the work firmly against the table.
 - j. Do not feed the material too fast while cutting. Only feed the material fast enough so that the blade will cut. Keep fingers away from the blade.

- k. Use caution when cutting off material which is irregular in cross section which could pinch the blade before the cut is completed. A piece of molding for example should lay flat on the table and not be permitted to rock while being cut.
 - l. Use caution when cutting off round material such as dowel rods, or tubing. They have a tendency to roll while being cut causing the blade to "bite". Always use a "V" block, or clamp round material to a miter gauge.
 - m. When backing up the workpiece, the blade may bind in the kerf (cut) . . . this is usually caused by sawdust clogging up the kerf. If this happens;
 - 1. Turn off the band saw . . . remove plug from power source outlet . . . remove cover from band saw. Insert a screwdriver or wedge in the kerf . . . rotate the wheels by hand while backing up the workpiece.
 - n. Never leave the band saw work area with the power on before the machine has come to a complete stop, or without removing and storing the switch key.
 - o. Never operate the band saw with protective cover on the unused shaft end of the motor removed.
8. If any part of this band saw should break, bend, or fail in any way or any electrical component fail to perform properly, or if any is missing, shut off power switch, remove power supply cord from power supply and replace damaged missing and/or failed parts before resuming operation.
9. Read and follow the instructions appearing on front of the band saw.

DANGER
FOR YOUR OWN SAFETY

1. READ AND UNDERSTAND OWNER'S MANUAL BEFORE OPERATING THIS MACHINE.
2. ALWAYS WEAR SAFETY GOGGLES WHEN OPERATING THIS MACHINE.
3. BE POSITIVE THE SAW BLADE IS INSTALLED PROPERLY—TEETH POINTING DOWNWARD TOWARD THE TABLE—BEFORE OPERATING MACHINE.
4. BE SURE BLADE TENSION, BLADE GUIDES, AND THRUST BEARINGS ARE PROPERLY ADJUSTED BEFORE OPERATING MACHINE—SEE OWNERS MANUAL.
5. ALWAYS ADJUST UPPER GUIDE TO CLEAR WORKPIECE BY NO MORE THEN 1/4 INCH.
6. MINIMIZE INJURY POTENTIAL OF CONTACT WITH SAW BLADE OR SANDING BELT BY KEEPING FINGERS A SAFE DISTANCE AWAY.
7. MAINTAIN CONTROL OF THE WORKPIECE AT ALL TIMES—HOLD FIRMLY AGAINST THE TABLE.
8. BE ATTENTIVE TO THIN CUT-OFF PIECES HITTING END OF SLOT IN INSERT, OR JAMMING IN SLOT.

10. Think Safety. Safety is a combination of operator common sense and alertness at all times the band saw/sander is operating.

additional safety instructions for band saw/sander

WARNING: THE 5" BAND SAW PULLEY AND THE 2-1/2" MOTOR PULLEY FURNISHED, WILL RUN THE BLADE AT APPROXIMATELY 900 RPM (OR 2700 FEET PER MINUTE) WHEN USED WITH A 1725 RPM MOTOR. NEVER SUBSTITUTE THESE PULLEYS TO INCREASE THIS SPEED BECAUSE IT COULD BE DANGEROUS.

WARNING: DO NOT ALLOW FAMILIARITY (GAINED FROM FREQUENT USE OF YOUR BAND SAW) TO BECOME COMMONPLACE. ALWAYS REMEMBER THAT A CARELESS FRACTION OF A SECOND IS SUFFICIENT TO INFLICT SEVERE INJURY.

motor specifications and electrical requirements

This machine is designed to use a 1725 RPM motor only. Do not use any motor that runs faster than 1725 RPM. It is wired for operation on 110-120 volts, 60 Hz., alternating current. **IT MUST NOT BE CONVERTED TO OPERATE ON 230 VOLTS. EVEN THOUGH SOME OF THE RECOMMENDED MOTORS ARE DUAL VOLTAGE.**

THESE CRAFTSMAN MOTORS HAVE BEEN FOUND TO BE ACCEPTABLE FOR USE ON THIS TOOL.

HP	RPM	VOLTS	CATALOG NO.
1/3	1725	110-120	1250
1/2	1725	110-120	1254
1/2	1725	110-120	1255

CAUTION: Do not use blower or washing machine motors or any motor with an automatic reset overload protector as their use may be hazardous.

CONNECTING TO POWER SOURCE OUTLET

This machine must be grounded while in use to protect the operator from electric shock.

Plug power cord into a 110-120V properly grounded type outlet protected by a 15-amp. time delay or Circuit-Saver fuse or circuit breaker.

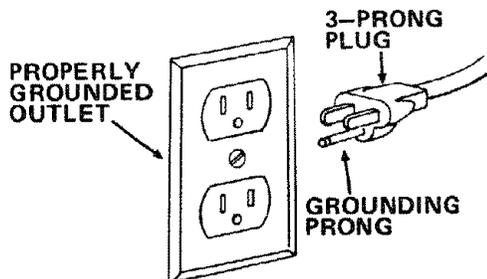
If you are not sure that your outlet is properly grounded, have it checked by a qualified electrician.

WARNING: DO NOT PERMIT FINGERS TO TOUCH THE TERMINALS OF PLUGS WHEN INSTALLING OR REMOVING THE PLUG TO OR FROM THE OUTLET.

WARNING: IF NOT PROPERLY GROUNDED THIS POWER TOOL CAN INCUR THE POTENTIAL HAZARD OF ELECTRICAL SHOCK. PARTICULARLY WHEN USED IN DAMP LOCATIONS IN PROXIMITY TO PLUMBING. IF AN ELECTRICAL SHOCK OCCURS THERE IS THE POTENTIAL OF A SECONDARY HAZARD SUCH AS YOUR HANDS CONTACTING THE SAW BLADE.

If power cord is worn or cut, or damaged in any way, have it replaced immediately.

If your unit is for use on less than 150 volts it has a plug that looks like below.



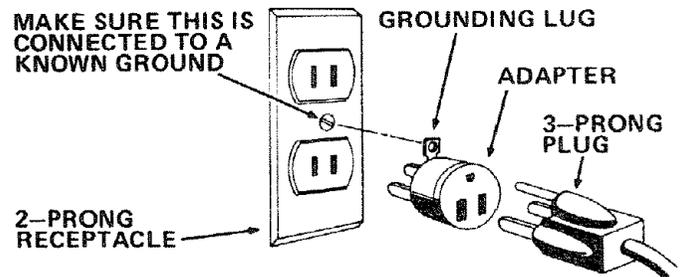
This power tool is equipped with a 3-conductor cord and grounding type plug which has a grounding prong, approved by Underwriters' Laboratories and the Canadian Standards Association. The ground conductor has a green jacket and is attached to the tool housing at one end and to the ground prong in the attachment plug at the other end.

This plug requires a mating 3-conductor grounded type outlet as shown.

If the outlet you are planning to use for this power tool is of the two prong type **DO NOT REMOVE OR ALTER THE GROUNDING PRONG IN ANY MANNER.** Use an adapter as shown and always connect the grounding lug to known ground.

It is recommended that you have a qualified electrician replace the TWO prong outlet with a properly grounded THREE prong outlet.

An adapter as shown below is available for connecting plugs to 2-prong receptacles. The green grounding lug extending from the adapter must be connected to a permanent ground such as to a properly grounded outlet box.



NOTE: The adapter illustrated is for use only if you already have a properly grounded 2-prong receptacle. Adapter is not allowed in Canada by the Canadian Electrical Code.

The use of any extension cord will cause some loss of power. To keep this to a minimum and to prevent overheating and motor burn-out, use the table below to determine the minimum wire size (A.W.G.) extension cord. Use only 3 wire extension cords which have 3-prong grounding type plugs and 3-pole receptacles which accept the tools plug.

Extension Cord Length	Wire Size A.W.G.
Up to 100 Ft.	16
100 - 200 Ft.	14
200 - 400 Ft.	10

CHECK MOTOR ROTATION

WARNING: FOR YOUR OWN SAFETY, MAKE SURE PLUG IS NOT CONNECTED TO POWER SOURCE OUTLET. WHEN CHANGING MOTOR ROTATION.

The motor must rotate **COUNTERCLOCKWISE** when viewed from the shaft end to which you will mount the pulley. (See page 11) If it does not, change the direction according to the instructions furnished with the motor.

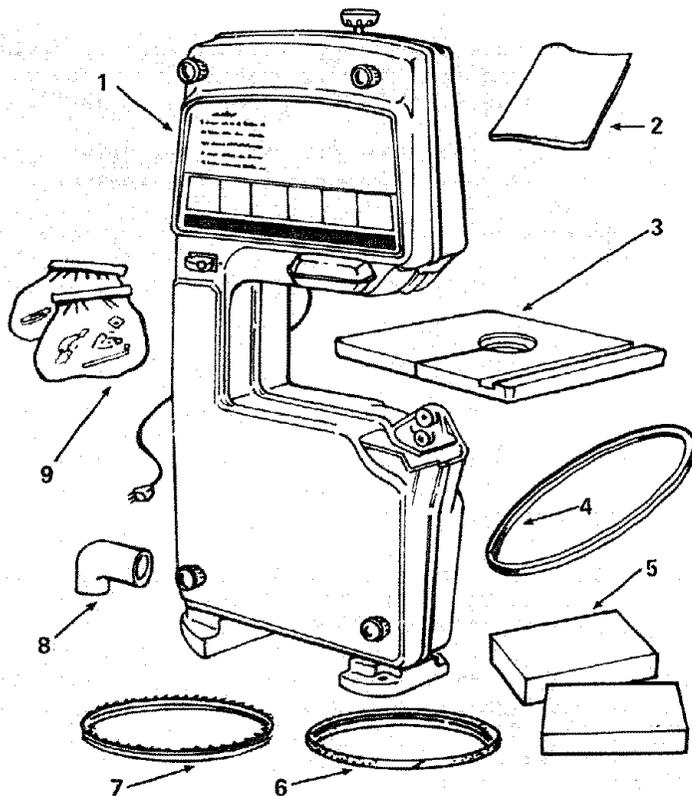
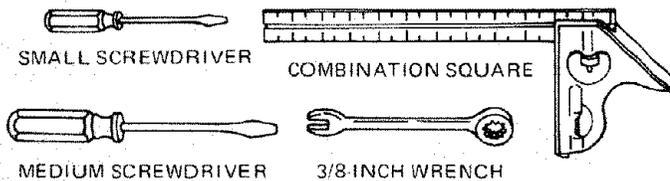
unpacking and checking contents

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TOOLS NEEDED



Your Band Saw/Sander is shipped complete in one carton (without motor or floor base).

Separate all parts from packing materials and check each item with illustration and "Table of Loose Parts." Make certain all items are accounted for, before discarding any packing material.

Key No.	TABLE OF LOOSE PARTS	Qty.
1	Basic Saw Assembly	1
2	Owner's Manual	1
3	Saw Table	1
4	1/2x 52-In. V-Belt	1
5	Carton containing Belt Guard, Belt-Guard Support, Support Bracket, three Clips and three Self-Tapping Screws	2
6	1/2-In. Sanding Belt	1
7	1/4-In. Band-Saw Blade	1
8	Sawdust Elbow	1
9	Two Bags containing the following items:	
	Set Screw Wrench, 1/8"	1
	Set Screw Wrench, 5/32"	1
	Set Screw Wrench, 3/16"	1
	Flat Washer, 1-1/8" diameter	2
	Trunnion Locknut	1
	Pan-Hd. Mach. Screw, Self Tap, 10-32x3/8"	2
	Pan-Hd. Mach. Screw, Self Tap, 8-32x1/4"	1
	Soc-Hd. Setscrew, Flat Pt., 5/16-18x3/8"	1
	Flat-Hd. Mach. Screw, 6-32x7/16"	1
	Hex Nut, 6-32	1
	Split Lockwasher, No. 6	1
	Tilt Pointer	1
	Knurled-Hd. Mach. Screw	1
	Tube Clamp	1
	Rubber Gasket (strips)	1
	Alignment Plate	1
	Motor Pulley, 2-1/2"	1
	Sanding Platen	1
	Table Insert (narrow slot, for sawing)	1
	Table Insert (wide slot, for sanding)	1
	Tilt Lock Handle (Wrench)	1
	Spacer	1
	Blade Tension Knob	1
	Switch Key	2

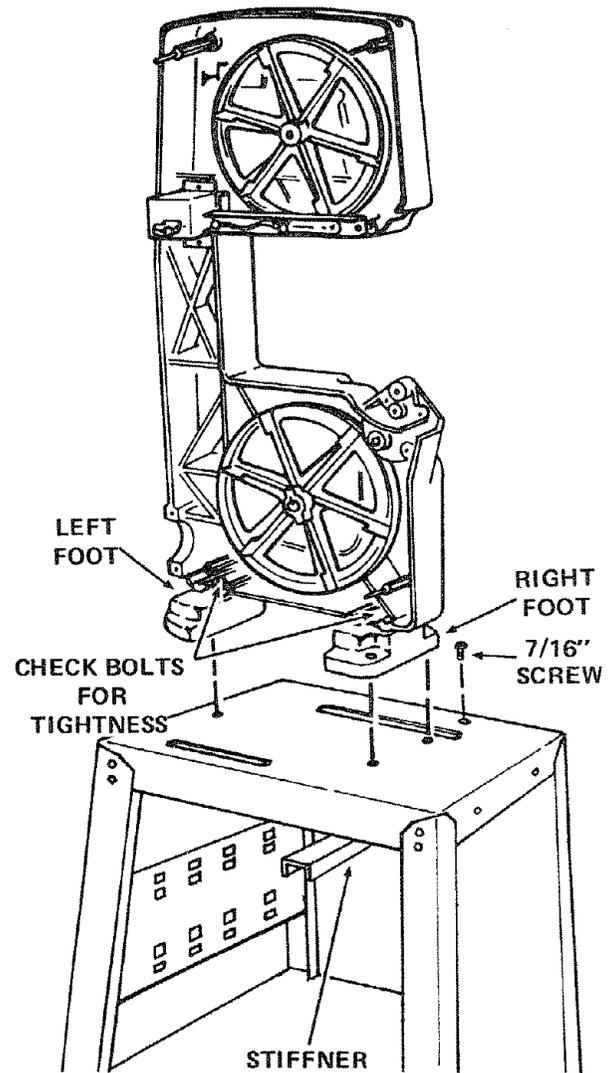
assembly

MOUNTING BAND SAW/SANDER ON RECOMMENDED CRAFTSMAN FLOOR BASE

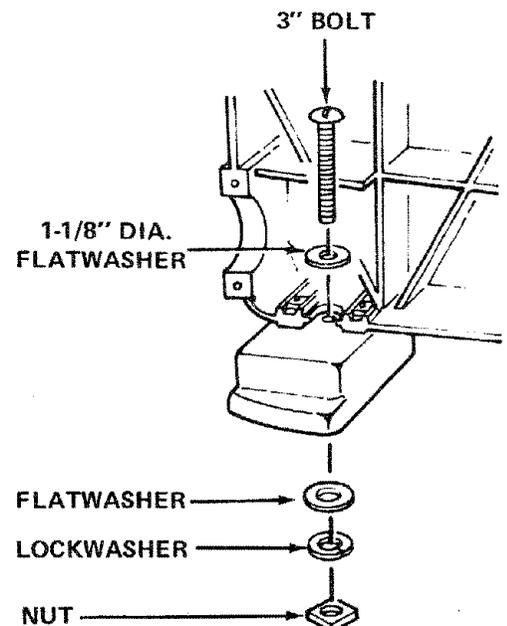
1. Unscrew the four knobs on the front of the band saw and remove the cover.

NOTE: Check the bolts which hold the feet to the band saw. Make sure they are tight . . . they may have come loose during shipment.

2. Place the band saw on the base, position as shown, and align mounting holes.
3. Find one 5/16"-18 x 3" Hex. Head bolt, two 5/16"-18 x 2" Hex. Head bolt, three nuts, flat washers and lockwashers furnished with base. Find one 1-1/8" dia. flat washer from among the loose parts furnished.
4. Position the stiffner furnished with base as shown.
5. Insert the two 2" bolts through the holes in the right foot and through the holes in the stiffner.
6. Place a flat washer, lockwasher, and a nut on these bolts from underneath. Do not tighten the nuts.



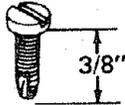
7. Place the 1-1/8" diameter flat washer on the 3" bolt and insert the bolt in the hole in the left foot. Place a flat washer, a lockwasher, and a nut on the bolt from underneath and tighten the nut. Now tighten the other two nuts which you installed before.
8. Find two Hex. Head screws 7/16" long, and two nuts furnished with base. Insert these screws thru the top of the base and stiffner and screw on the nuts. Tighten the nuts.



assembly

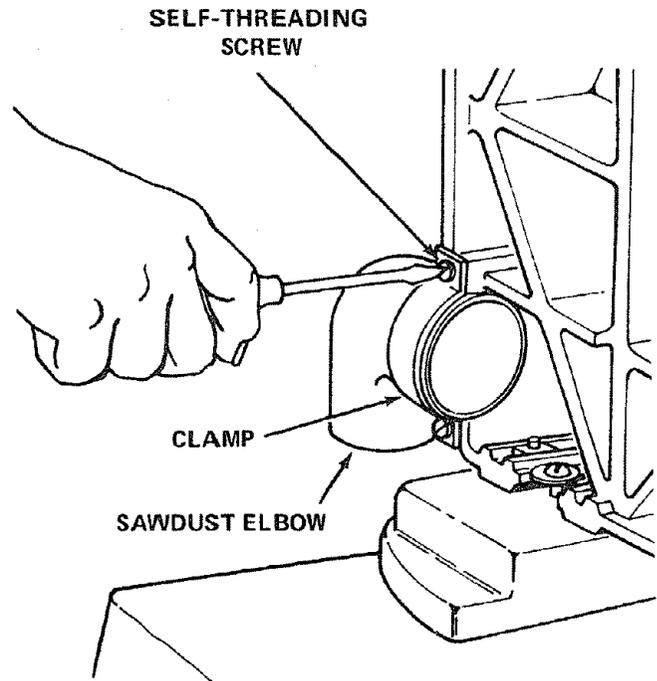
INSTALLING SAWDUST ELBOW

1. Find the sawdust elbow, the clamp, the strip of rubber gasket, and two 10-32 x 3/8" self-threading screws among the loose parts.



The holes for attaching the clamp are not threaded, but the screws are "self-threading" and will cut a thread as they are screwed in.

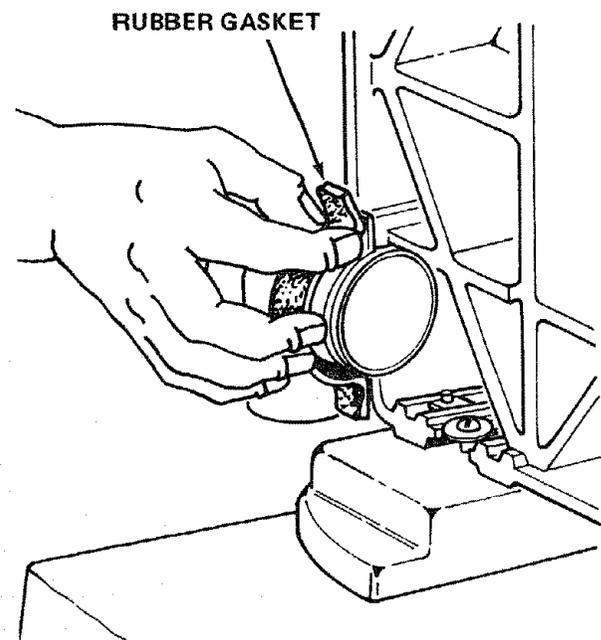
2. Screw both of the self-threading screws into the holes to cut the threads and then remove them.
3. Place the elbow in the opening, and attach the clamp with the two screws.



4. Peel off the protective covering from the rubber gasket and stick it around the clamp. Make sure it extends a little beyond each end of the clamp.

The gasket will help to prevent sawdust from leaking out.

For the most efficient removal of sawdust, attach a Craftsman Home-n-Shop Vac to the sawdust elbow.

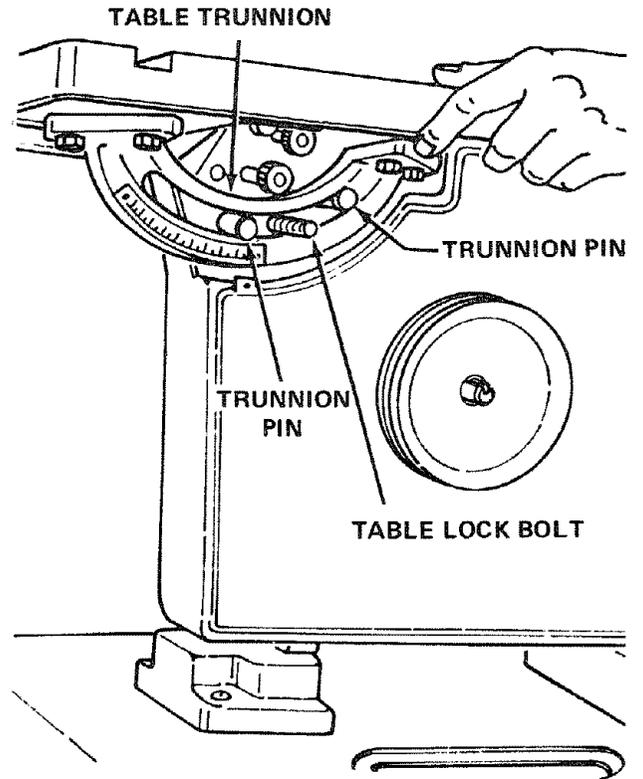


INSTALLING TABLE

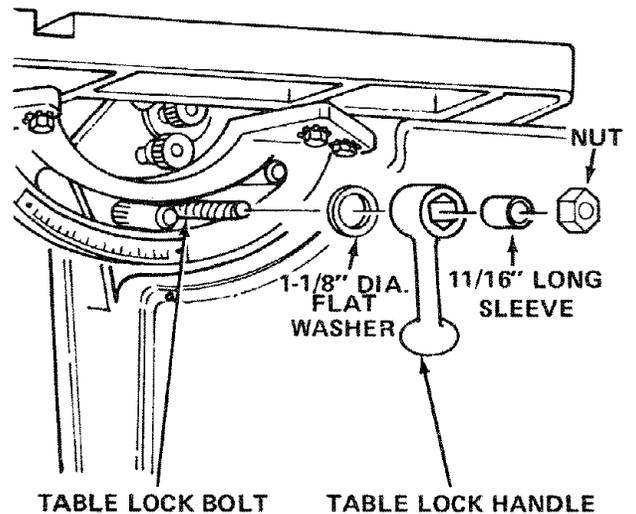
Remove the protective oil that is applied to the table. Use any ordinary household type grease and spot remover.

CAUTION: Never use gasoline, naphtha or similar highly volatile solvents.

Apply a coat of automobile wax to the table.



1. Place the table on the band saw so that the two trunnion pins and the table lock bolt go through the slot in the trunnion.
2. Find the 1-1/8" dia. flat washer, a sleeve 11/16" long, the trunnion lock nut and the table lock handle from among the loose parts.
3. Hold the head of the table lock bolt inside the band saw with your left hand and put the 1-1/8" dia. flat washer, the sleeve, and the handle on the bolt.
4. Screw the nut on the bolt and tighten it with the handle while the table is in a horizontal position.



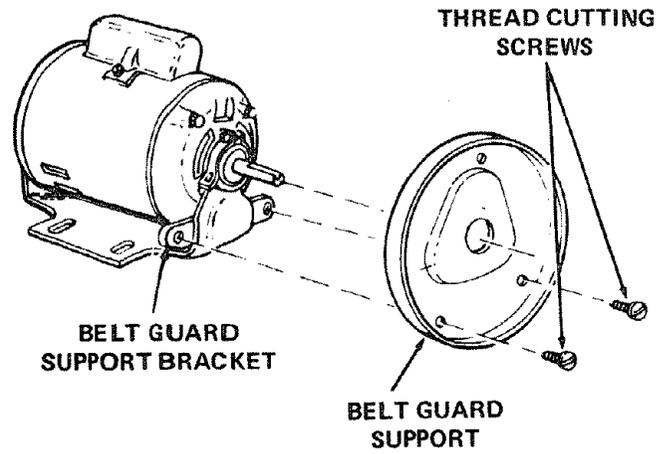
assembly

MOTOR PULLEY BELT GUARD AND MOTOR INSTALLATION

MOUNTING BELT GUARD

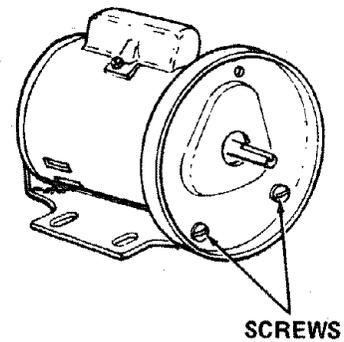
1. Place the motor on your workbench with the shaft facing you.

If you are using a double shaft motor, the 5/8" dia. shaft must be facing you.



2. Attach guard support to the bracket with the two screws, furnished with the guard.

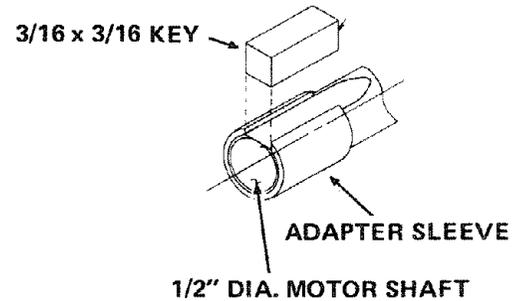
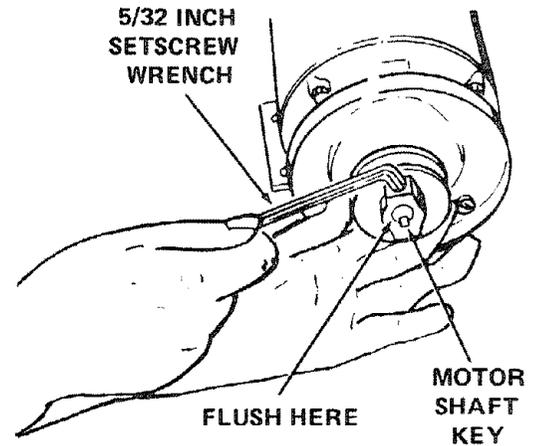
NOTE: The holes in the bracket are not threaded, but the screws are "thread cutting screws" and will cut a thread as they are tightened.



MOUNTING PULLEY

1. Loosen setscrew in motor pulley and place the pulley on the shaft with the hub flush with the end of the shaft, insert the motor shaft key and tighten setscrew with 5/32" setscrew wrench.

When installing the pulley on a 1/2" diameter motor shaft, make sure that the adapter sleeve and 3/16" square key furnished with your motor are in place. Then tighten the setscrew with a 5/32" setscrew wrench.

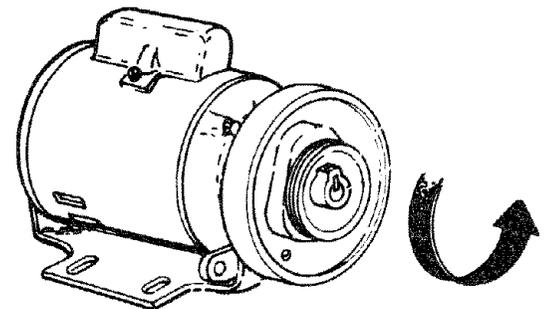


CHECK MOTOR ROTATION

The motor must rotate **COUNTERCLOCKWISE** when viewed from the **PULLEY** end.

1. Place the motor on your workbench or on the floor.
2. Stand clear of the motor and plug the cord into a properly grounded outlet (See page 4). Notice the rotation of the pulley. If it is not turning **COUNTERCLOCKWISE**, **REMOVE** the plug from the outlet, and change the rotation of the motor according to the instructions furnished with the motor.

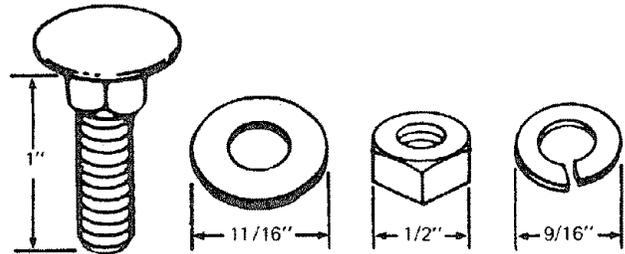
WARNING: FOR YOUR OWN SAFETY, MAKE SURE PLUG IS NOT CONNECTED TO POWER SOURCE OUTLET WHEN CHANGING MOTOR ROTATION.



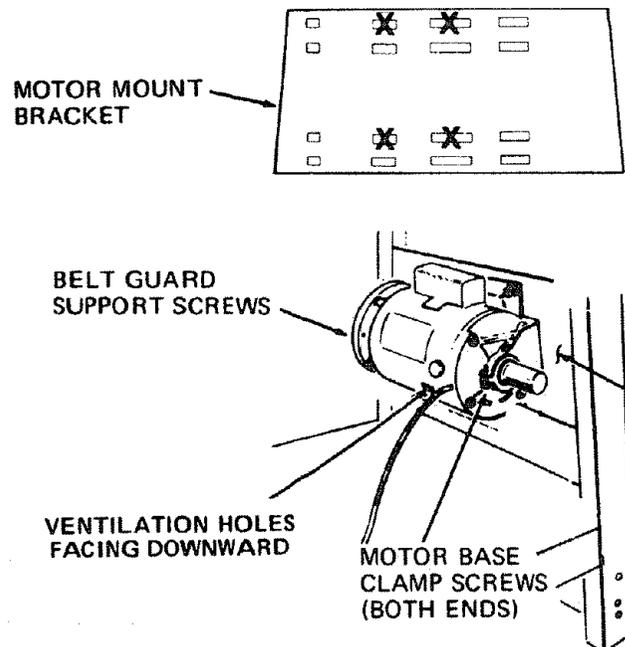
assembly

MOUNTING MOTOR

1. Find four 5/16"-18 x 1" carriage bolts, flat washers, lockwashers and nuts supplied with base.



2. Insert bolts through holes marked "X" from behind motor mount bracket.
3. Attach motor . . . place a flat washer and a lockwasher on each bolt . . . screw on nuts but DON'T TIGHTEN them.
4. Loosen the two BELT GUARD SUPPORT SCREWS.
5. Loosen the two MOTOR BASE CLAMP SCREWS and rotate the motor so that the ventilation holes are facing downward . . . tighten the screws.
6. Tighten the BELT GUARD SUPPORT SCREWS.



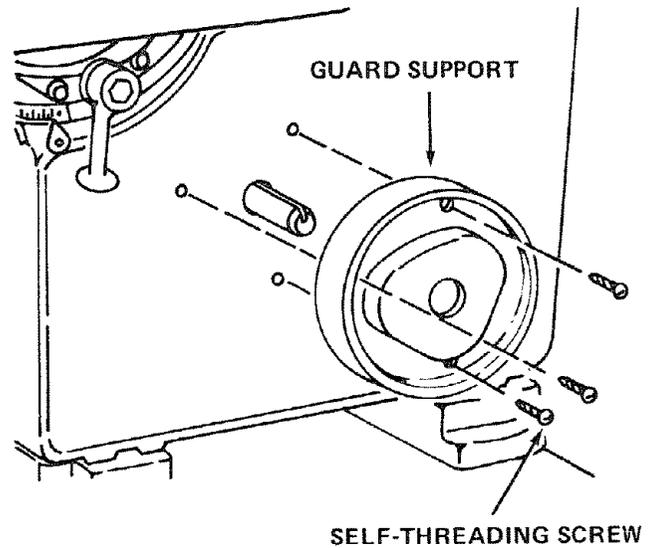
ATTACHING BELT GUARDS

1. Remove the pulley from the band saw, using the 5/32" setscrew wrench to loosen the screw. Be careful not to lose the shaft key.

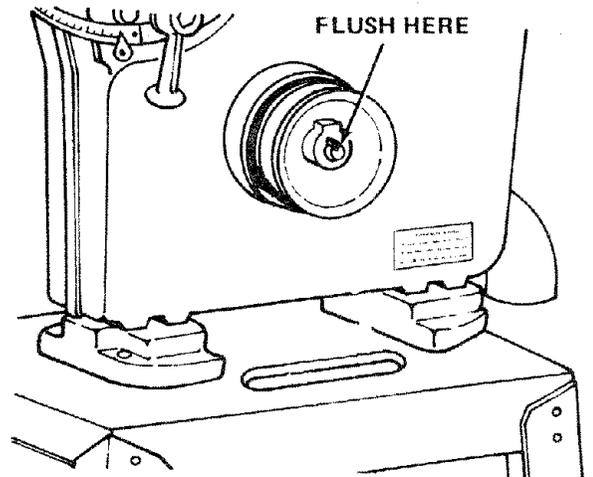
Attach the belt guard support with the three screws furnished with the guard.

NOTE: The support bracket is not required.

The holes for attaching the support are not threaded, but the screws are "self-threading" and will cut a thread as they are screwed in.

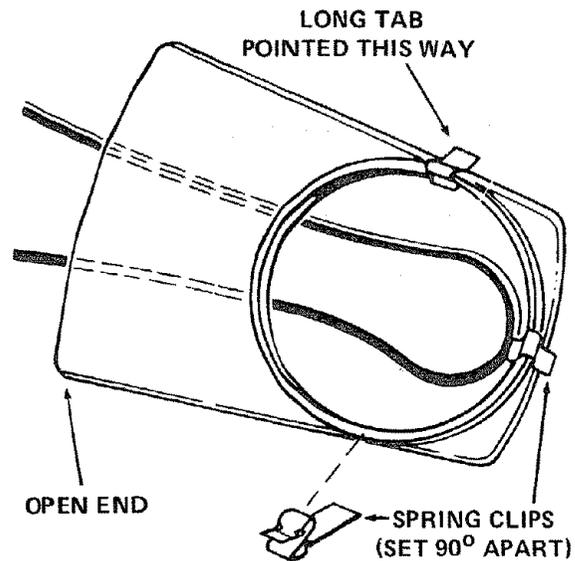


2. Replace the pulley with the hub flush with the end of the shaft.

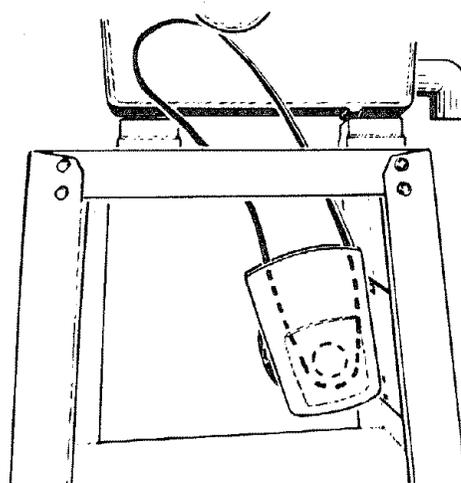


assembly

3. Install three clips on the belt guard 90° apart with the long tabs pointing AWAY from the round opening.
4. Insert one looped end of belt all the way into guard so that it will be below motor pulley.



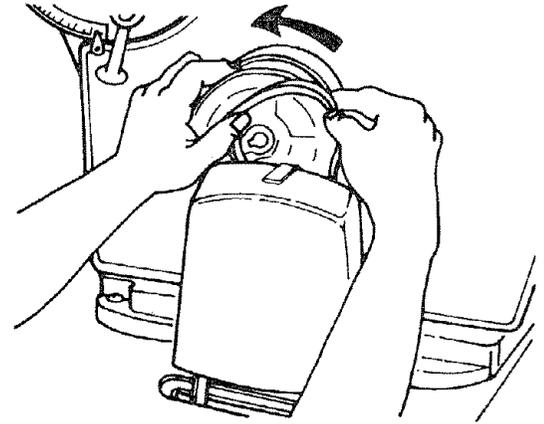
5. Snap the guard into position as shown.



6. Look down into guard . . . pull belt upwards onto motor pulley.
7. Insert the belt into the open end of the second belt guard, and out the round opening. Place belt onto the band saw pulley by rotating pulley.
8. Snap the belt guard into position.
9. Move the motor sideways so that the belt is in the center of the opening in the top of the base.
10. PUSH downward on motor to apply tension to belt and tighten motor bolt nuts.

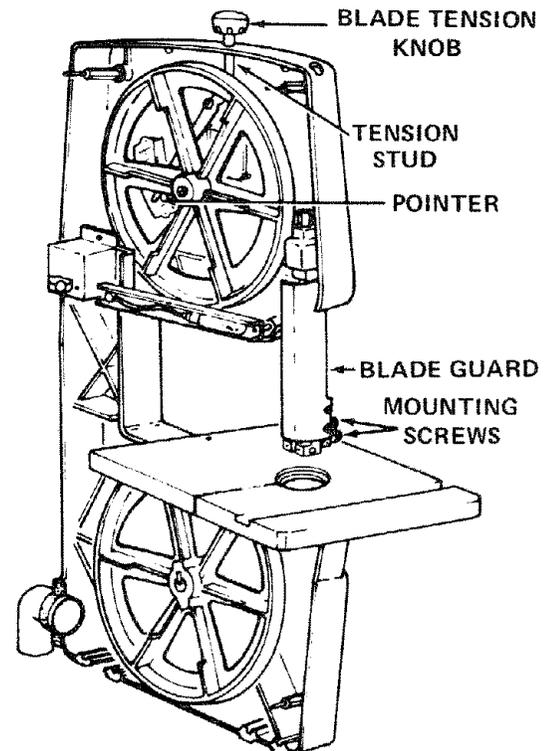
NOTE: It is only necessary to tension the belt so that it does not slip while running.

If you cannot obtain sufficient tension with the motor pushed all the way down, remove the four motor bolts and insert them in the LOWER set of holes.



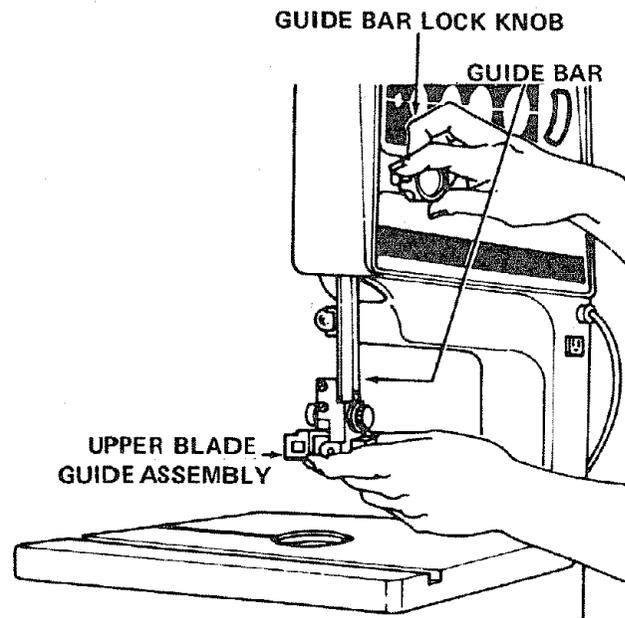
INSTALLING THE BLADE

1. Find the blade tension knob among the loose parts. Put a dab of grease or vaseline on the end of the knob and screw it on the tension stud. Screw it on only a few turns, just enough to start moving the pointer.
2. Loosen the two mounting screws and remove the blade guard.



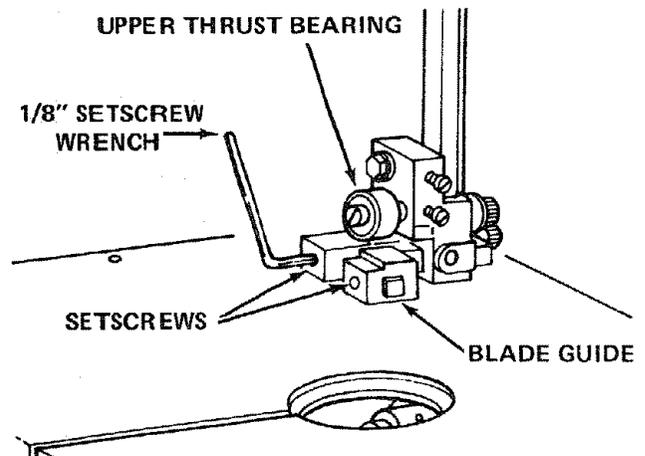
assembly

3. Loosen the guide bar lock knob and position the upper guide assembly approximately three inches above the table and tighten the knob.

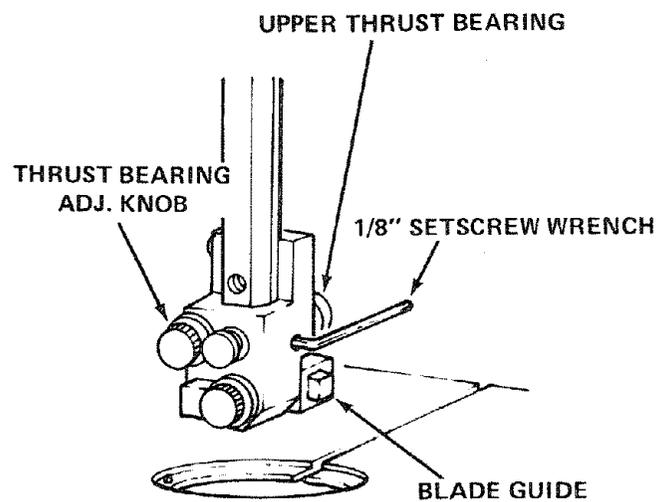


4. Loosen the two setscrews which lock the upper blade guides and separate them about 1/8".

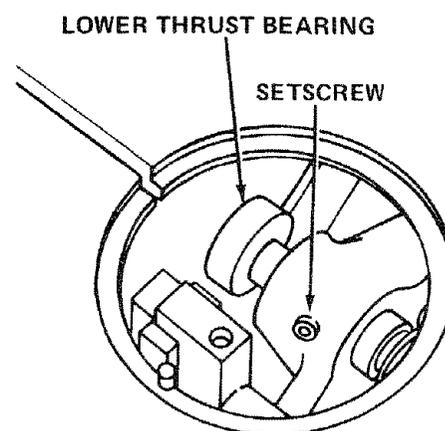
Do that same thing to the lower guides beneath the table.



5. Loosen the setscrew which locks the upper thrust bearing and turn knob until the thrust bearing is all the way back.



-
6. Loosen the setscrew which locks the lower thrust bearing and turn the knob until the thrust bearing is all the way back.



assembly

- Carefully uncoil the blade, holding it at arms length.
- Place the blade over the wheels with the teeth pointing downwards. Make sure the blade is between the blade guides and is in the center of the rubber tires.
- Screw down the tension knob until the pointer points to 1/4. This will put sufficient tension on the blade which is 1/4" wide.
- Turn the upper wheel by hand a few times and notice if the blade remains in the approx. center of the tire on the top wheel.

If the blade moves away from the center of the wheel while you are turning it, the blade is not TRACKING properly.

The top wheel shaft is hinged which allows the wheel to be tilted so that the blade can be TRACKED. By turning the tracking adjustment screw, the wheel will be tilted.

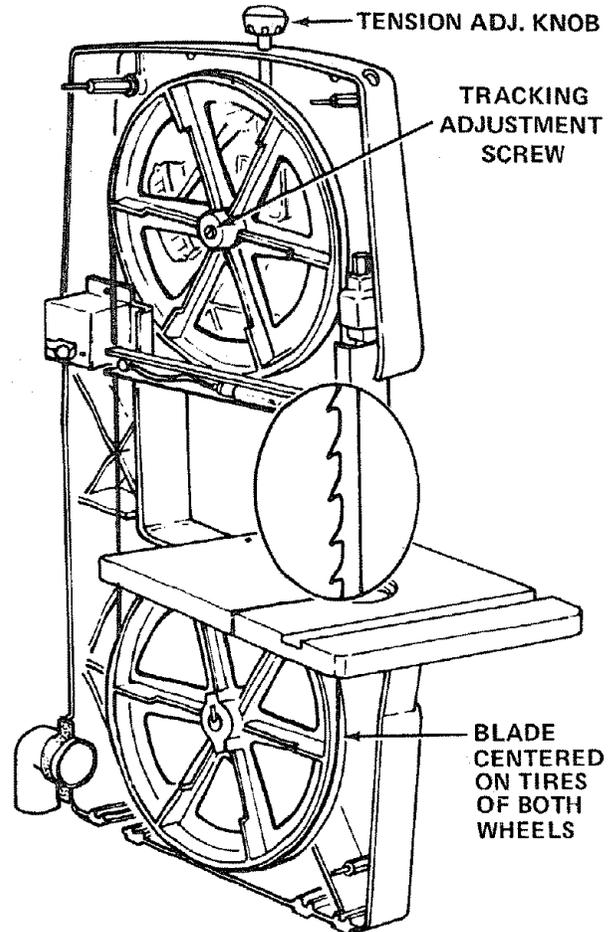
If the blade moves toward the front of the band saw:

- Turn the tracking adjustment screw clockwise about 1/4 of a turn, as though you were tightening it.

If the blade moves toward the back of the band saw:

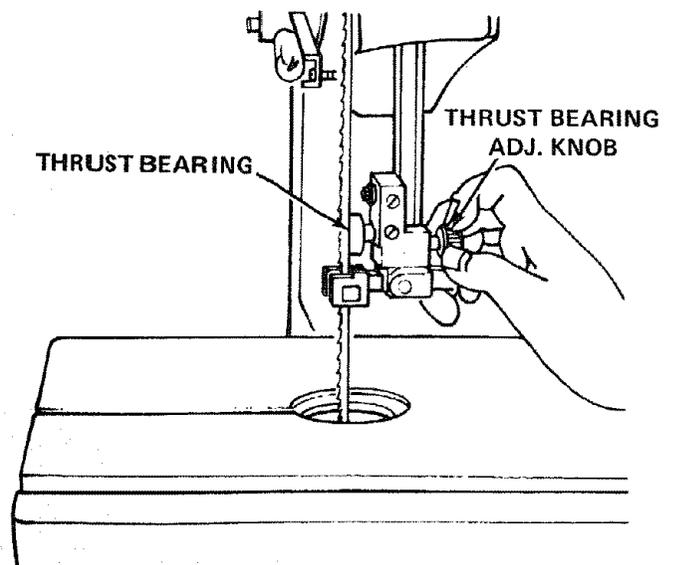
- Turn the tracking adjustment screw counterclockwise about 1/4 of a turn as though you were loosening it.

Turn the screw just enough to cause the blade to run in the approximate center of the tire.

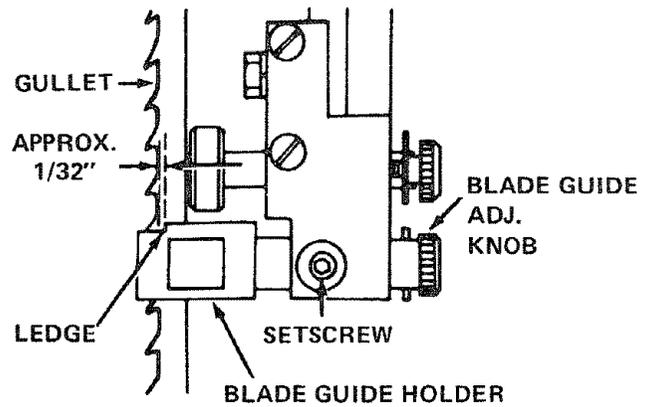


The thrust bearings support the blade from the rear and will rotate when the blade is pushed against them while you are cutting. As soon as you stop cutting, the bearings should stop rotating.

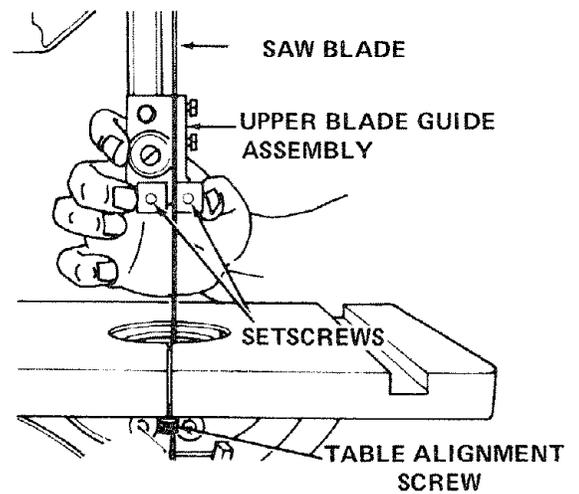
- Turn the thrust bearing adjustment knob so that the thrust bearing moves toward the blade and almost touches it.
- Turn the upper wheel by hand so that the blade moves downward, move the bearing until it barely touches the blade and starts to rotate. Now move the bearing back slightly, until it stops rotating. Tighten the thrust bearing setscrew.
- Adjust the lower thrust bearing the same way.



14. Loosen the setscrew which locks the blade guide holder.
15. Turn the blade guide adjustment knob, so that the guides move toward the blade. Move them until the "ledge" is about 1/32" from the deepest part of the blade teeth. This deep part is called a "gullet". Tighten the setscrew.
16. Adjust the lower guides the same way.

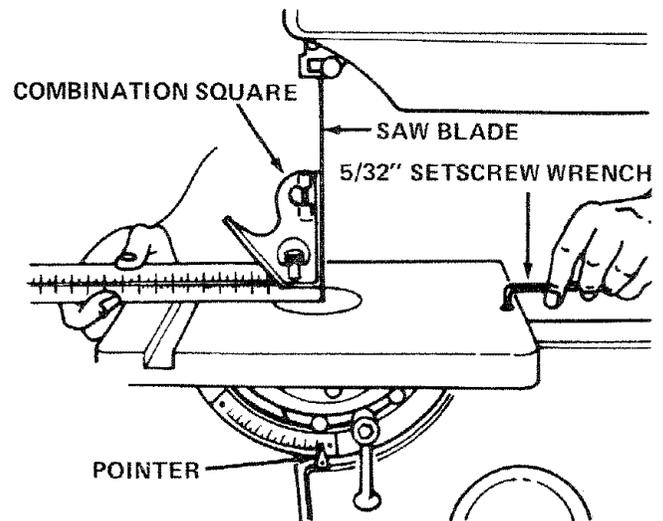


17. Press the two guides evenly against the sides of the blade, but don't pinch the blade. Release the guides and rotate the upper wheel a little bit, moving the blade downward. Make sure one guide is not farther away from the blade than the other. Tighten both setscrews.
18. Adjust the lower guides the same way.
19. Rotate the upper wheel a few times by hand, and check the guides and thrust bearings. Make readjustments if necessary.
20. Replace the blade guard on the upper guides.
21. Locate the table insert with the narrow slot and place it in the opening in the table.
22. Replace the cover.



ADJUSTING THE TABLE

1. Locate among the loose parts a 5/16"-18" x 3/8" socket head flat point setscrew and a knurled head screw. The knurled head screw keeps the table in alignment. Screw it into the tapped hole underneath the front edge of the table.
2. The socket head screw acts as a 90° stop. Screw it partially into the tapped hole in the top of the table on the left side. Use the 5/32" setscrew wrench.
3. Raise the blade guides all the way up.
4. Loosen the table lock slightly and push down on the left side of the table until it touches the frame of the band saw.
5. Screw in the stop screw and notice that as it touches the frame, the table will start to tilt.
6. Place a square on the table against the blade and continue to screw in the stop screw until the table is square with the blade. Tighten the table lock.
7. Find the pointer and a pan head screw 8-32 x 1/4 inches long and attach the pointer. Set at 0 degrees and tighten the screw.



assembly

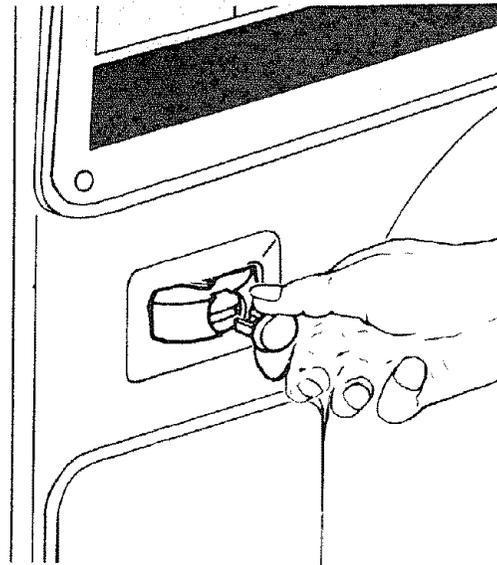
ON-OFF SWITCH

WARNING: DON'T CONNECT POWER CORD TO ELECTRICAL OUTLET IN YOUR SHOP UNTIL YOU ARE SURE THAT MOTOR ROTATION IS CORRECT. (SEE PAGE 11).

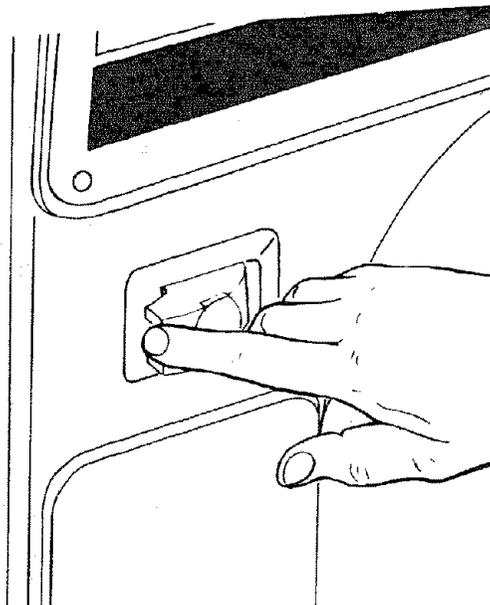
The On-Off Switch has a locking feature. THIS SHOULD PREVENT UNAUTHORIZED AND POSSIBLY HAZARDOUS USE BY CHILDREN AND OTHERS.

1. Insert key into switch.

NOTE: Key is made of yellow plastic

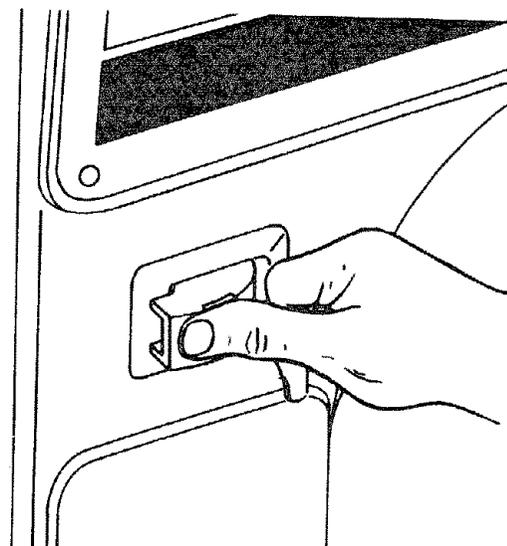


2. To turn machine on, insert finger under switch lever and pull end of switch out.



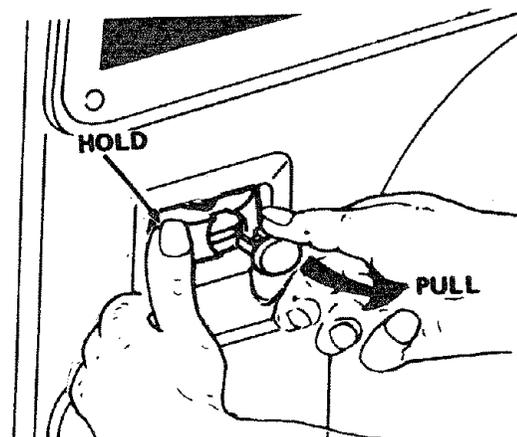
3. To turn machine OFF . . . PUSH lever in.

Never leave the machine unattended until it has come to a complete stop.

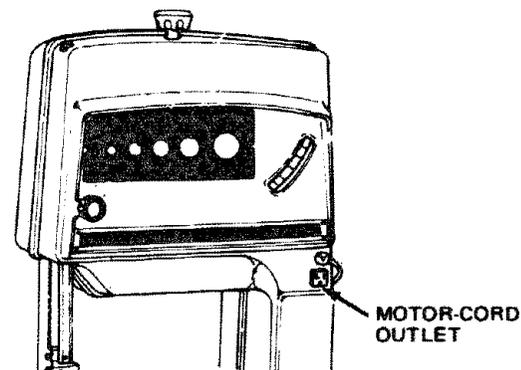


4. To lock switch in OFF position . . . hold switch IN with one hand . . . REMOVE key with other hand.

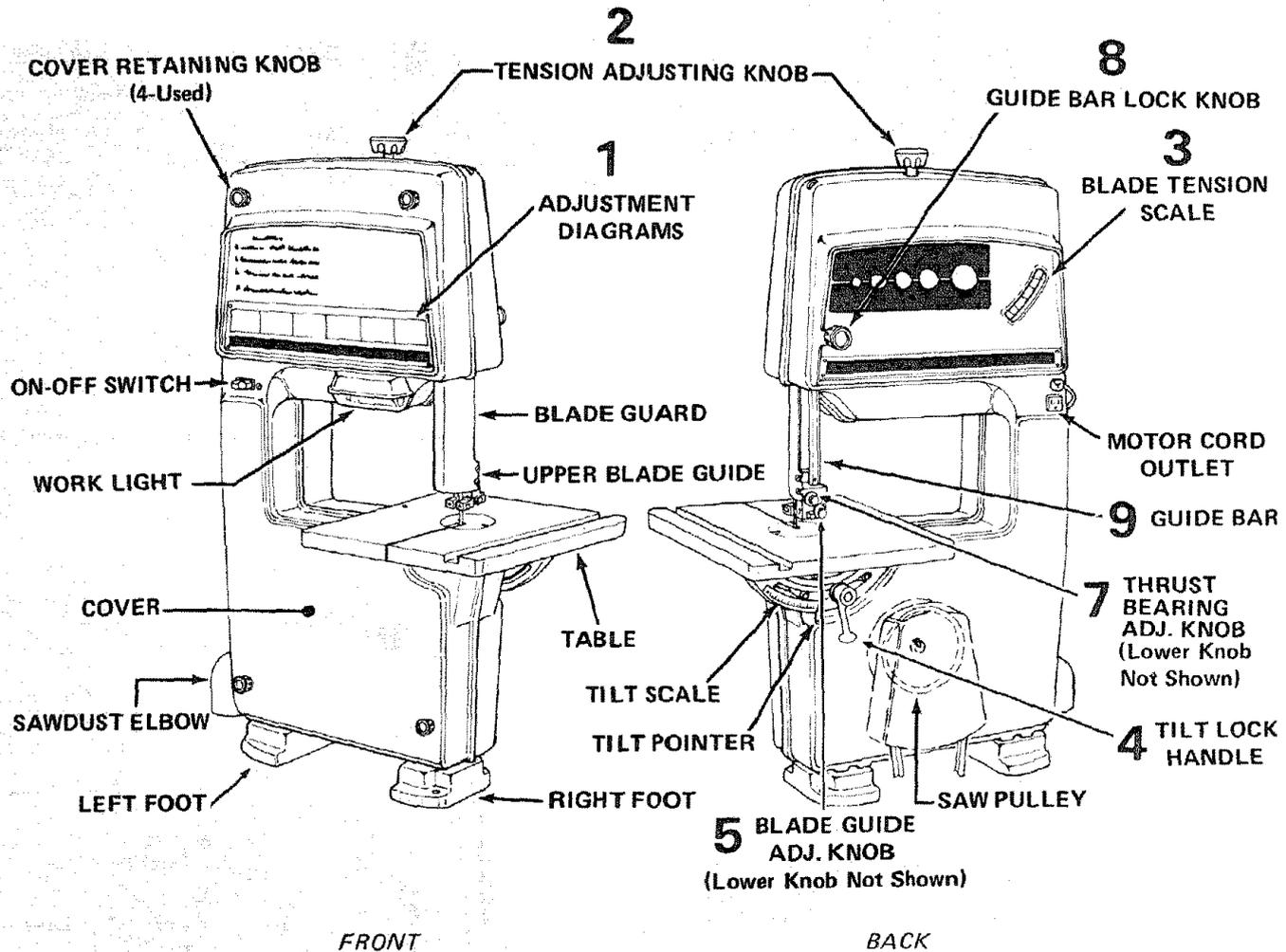
WARNING: FOR YOUR OWN SAFETY, ALWAYS LOCK THE SWITCH "OFF" WHEN MACHINE IS NOT IN USE . . . REMOVE KEY AND KEEP IT IN A SAFE PLACE . . . ALSO . . . IN THE EVENT OF A POWER FAILURE (ALL OF YOUR LIGHTS GO OUT) TURN SWITCH OFF . . . LOCK IT AND REMOVE THE KEY. THIS WILL PREVENT THE MACHINE FROM STARTING UP AGAIN WHEN THE POWER COMES BACK ON.



5. Connect motor cord to outlet on back of band saw.



getting to know your band saw/sander



1. **ADJUSTMENT DIAGRAMS** . . . Help you to become familiar with the adjustments.
2. **TENSION ADJUSTMENT KNOB** . . . Tightening the knob will increase the tension on the blade. Loosening it will decrease the tension.
3. **TENSION SCALES** . . . The fractional markings indicate the correct blade tension for various widths of blades. For example, when installing a 1/4" wide blade, tighten the tension knob until the pointer is pointing to the 1/4 marking.
4. **TABLE TILTING** . . . Loosen the table lock handle, tilt the table to the desired angle and tighten the lock handle. To return the table to the 90° position, tilt it until the 90° stop screw rests on the frame, then tighten the lock handle.

5. **BLADE GUIDE ADJUSTMENT** . . . Turning the knob moves the guides in or out for various widths of blades.
6. **LATERAL BLADE GUIDE ADJUSTMENT** . . . The guides can be adjusted sideways and locked in position by the setscrews.
7. **BLADE THRUST BEARING ADJUSTMENT** . . . Turning the knob moves the thrust bearings in or out for various widths of blades.
8. **GUIDE BAR LOCK KNOB** . . . The upper blade guides should not be more than 1/4" above your workpiece while cutting. Always adjust the guides before turning on the band saw and lock the guide bar by tightening the knob.

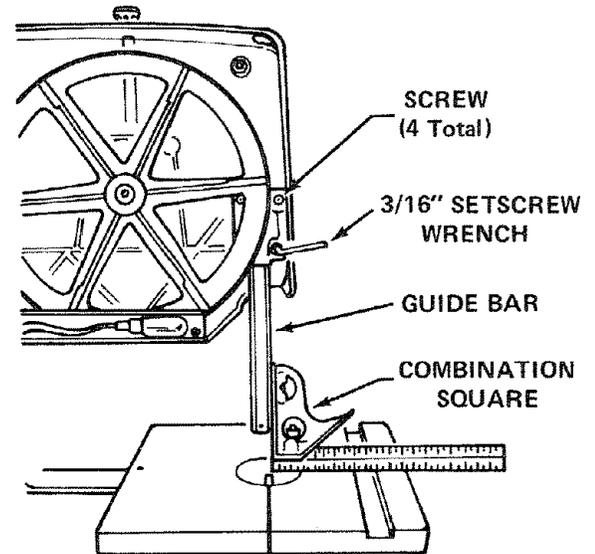
9. GUIDE BAR

When the upper guides are raised or lowered, they must not deflect the blade sideways. This means that the guide bar must be parallel to the blade, or square with the table.

1. Remove the blade guard, cover, blade, and the upper guide assembly.
2. Lower the guide bar until the end is approximately 1-3/4" from the table.
3. Hold a square on the table against the guide bar.
4. If the bar is not square with the table, loosen the four screws in the guide bar support. Use the 3/16" set-screw wrench. To reach the lower left screw, it will be necessary to tilt the upper wheel outward.

NOTE: The holes in the guide bar support are larger than the screws. This allows the support to be moved.

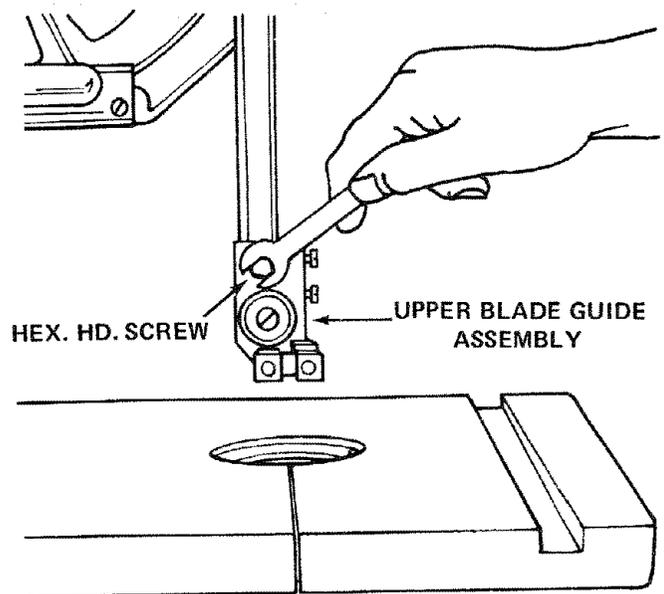
5. Move the guide bar until it is square with the table, then tighten the screws.



INSTALLING SANDING ATTACHMENT

WARNING: FOR YOUR OWN SAFETY, TURN SWITCH "OFF" AND ALWAYS REMOVE PLUG FROM POWER SOURCE OUTLET BEFORE INSTALLING SANDING ATTACHMENT.

1. Remove the blade guard, the table insert, and the table alignment screw.
2. Remove the cover, release the blade tension and remove the blade.
3. Remove the upper blade guide assembly. Use a 3/8" wrench to remove the screw.
4. Loosen the setscrew that locks the lower thrust bearing, and move the bearing as far back as it will go.
5. Loosen the two setscrews that lock the lower blade guides. Spread them apart so that the end of each guide is inside the holder.

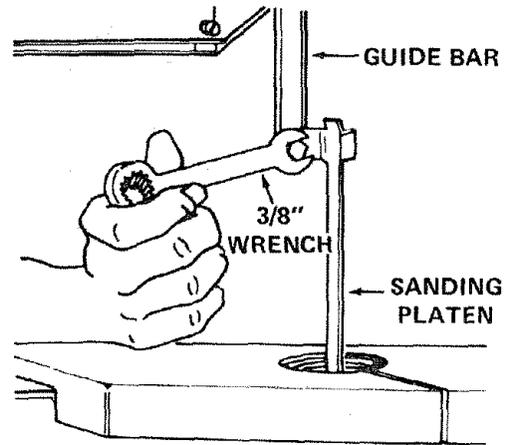


getting to know your band saw/sander

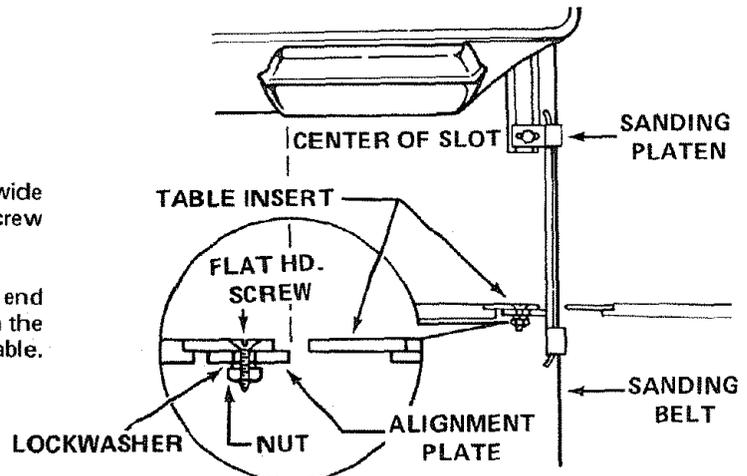
6. Attach the sanding platen to the guide bar with the same screw that held the upper blade guide assembly. Do not tighten the screw at this time.

On the smooth side of the sanding belt, you will find a "directional arrow". The belt must run in the direction of this arrow so that the splice does not come apart.

7. Place the belt on the wheels and tighten the tension knob until the pointer points to SAND. Rotate the upper wheel by hand a few times to make sure that the belt is tracking properly and is not rubbing the guides.
8. Loosen the guide bar lock knob and lower the end of the sanding platen below the table.

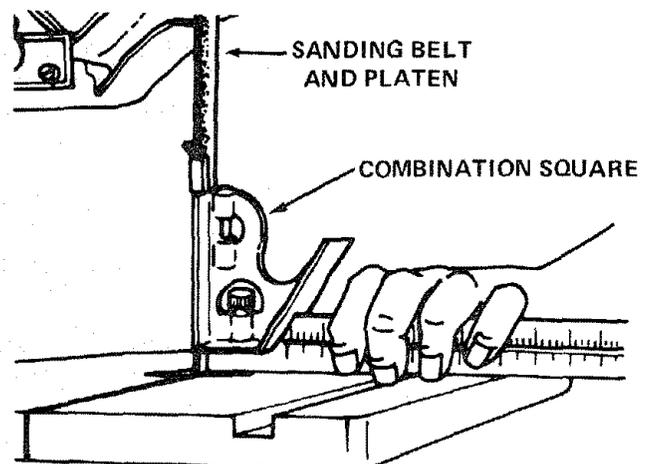


9. Locate among the loose parts, the insert with the wide slot, the alignment plate, a flat head machine screw 6-32 x 7/16", a small hex nut and lockwasher.
10. Attach the alignment plate to the insert so that the end of the alignment plate is in the center of the slot in the insert. Place the insert in the opening in the table.



11. Hold a square on the table against the sanding belt and platen.
12. Tighten the hex. head screw which holds the platen to the guide bar.
13. Replace the cover.

WARNING: FOR YOUR OWN SAFETY, DO NOT SAND IRON OR STEEL BECAUSE THE SPARKS COULD IGNITE THE SAWDUST INSIDE YOUR BAND SAW.



basic band saw/sander operation

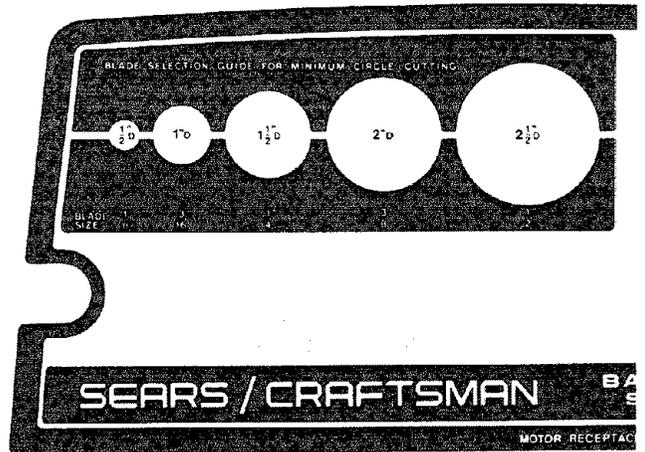
BASIC BAND SAW/SANDER OPERATION

A band saw is basically a "curve cutting" machine. It differs from a saw in two respects. It is capable of cutting thicker material and it cuts faster. Unlike a saw, it is not capable of doing inside cutting.

Your Craftsman Band Saw/Sander is not only capable of the usual band saw operations, but it can be converted into a sander as well. You can finish wood, certain compositions and plastics and non-ferrous metals.

SAWING

1. Adjust the upper guides not more than 1/4" above your workpiece.
2. Use both hands while feeding the work into the blade. Hold the workpiece firmly against the table. Use gentle pressure, and do not force the work, but allow the blade to cut.
3. The smallest diameter that can be cut out is determined by the width of the blade. For example, a 1/4" wide blade will cut a minimum diameter of approximately 1-1/2".



SANDING

The sanding belt cuts very rapidly. Practice with some scraps of wood first before you attempt to sand your actual workpiece.

1. Press the workpiece gently against the sanding belt, and keep moving it until the edge is smooth.

maintenance

WARNING: FOR YOUR OWN SAFETY, TURN SWITCH "OFF" AND REMOVE PLUG FROM POWER SOURCE OUTLET BEFORE MAINTAINING OR LUBRICATING YOUR BAND SAW.

TIRES

Pitch and sawdust that accumulate on the tires should be removed with a stiff brush or scraped off with a piece of wood. Do not use a sharp knife or any kind of solvent.

When the tires become worn they should be replaced. When replacing the tires, stretch them around the wheels but do not glue them on.

GENERAL

Keep your Band Saw/Sander clean.

Remove the sawdust from the inside.

Do not allow pitch to accumulate on the table, the insert, the guides or the thrust bearings. Clean them with Craftsman Gum and Pitch Remover. **CAUTION: Do not immerse the thrust bearings.**

Apply a thin coat of automobile-type wax on the table so that the wood slides easily while cutting.

MOTOR

Frequently blow out any sawdust from the motor.

If the power cord is worn or cut, or damaged in any way, have it replaced immediately.

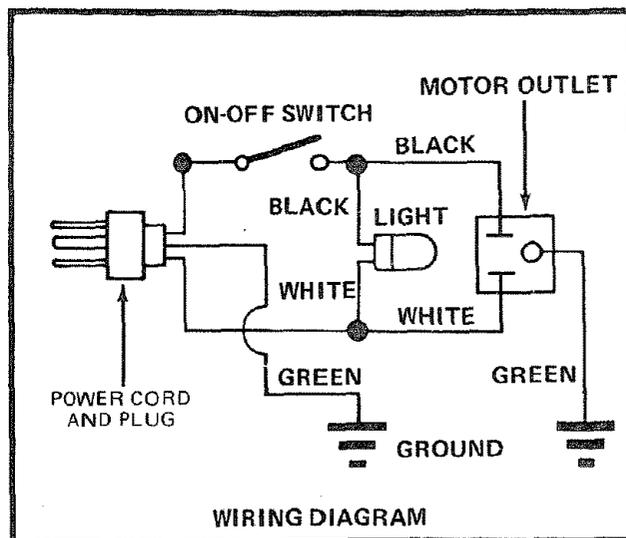
For motor maintenance, follow instructions furnished with the motor.

LUBRICATION

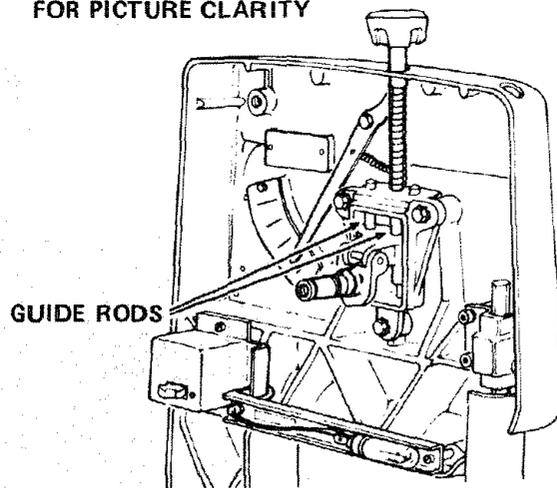
All of the **BALL BEARINGS** are packed with grease at the factory. They require no further lubrication.

For motor lubrication, follow instructions furnished with the motor.

Periodically apply a few drops of oil to the upper wheel guide rods.



WHEEL NOT SHOWN FOR PICTURE CLARITY



trouble shooting

WARNING: FOR YOUR OWN SAFETY, TURN SWITCH "OFF" AND REMOVE PLUG FROM POWER SOURCE OUTLET BEFORE TROUBLE SHOOTING YOUR BAND SAW/SANDER.

TROUBLE	PROBABLE CAUSE	REMEDY
Motor will not run.	<ol style="list-style-type: none"> 1. Defective On-Off switch. Defective switch cord. Defective switch box receptacle. 2. Motor protector open, (only if your motor is equipped with an overload protector). Other cause. 	<ol style="list-style-type: none"> 1. Replace defective parts before using Band Saw/Sander again. 2. Consult Sears Service. Any attempt to repair this motor may create a HAZARD unless repair is done by a qualified service technician. Repair service is available at your nearest Sears Store.
Blade does not run in the approximate center of the upper wheel.	<ol style="list-style-type: none"> 1. Not tracking properly. 	<ol style="list-style-type: none"> 1. Adjust tracking, see Assembly Section, "Installing the Blade."
Blade does not run in the approximate center of the lower wheel.	<ol style="list-style-type: none"> 1. Lower wheel not positioned correctly on shaft. 	<ol style="list-style-type: none"> 1. Reposition the wheel, see Assembly Section, "Installing the Blade."
Band Saw slows down when cutting.	<ol style="list-style-type: none"> 1. Belt too loose. 2. Motor pivots in motor base. 3. Cutting too small a radius. 4. Dull blade. 	<ol style="list-style-type: none"> 1. Adjust belt tension, see Assembly Section, "Attaching Belt Guards." 2. Tighten motor base clamp screws. See Assembly Section, "Motor Installation". 3. Stop feeding, and back up the material slightly, until the band saw speeds up. 4. Replace blade.
Blades breaking.	<ol style="list-style-type: none"> 1. Too much tension. 2. Kink in blade caused by cutting too small a radius or turning the material too fast when cutting. 	<ol style="list-style-type: none"> 1. Adjust tension. See Getting To Know Your Band Saw/Sander, "3 Tension Scales." 2. Use correct cutting technique. See Basic Band Saw/Sander Operation Section.

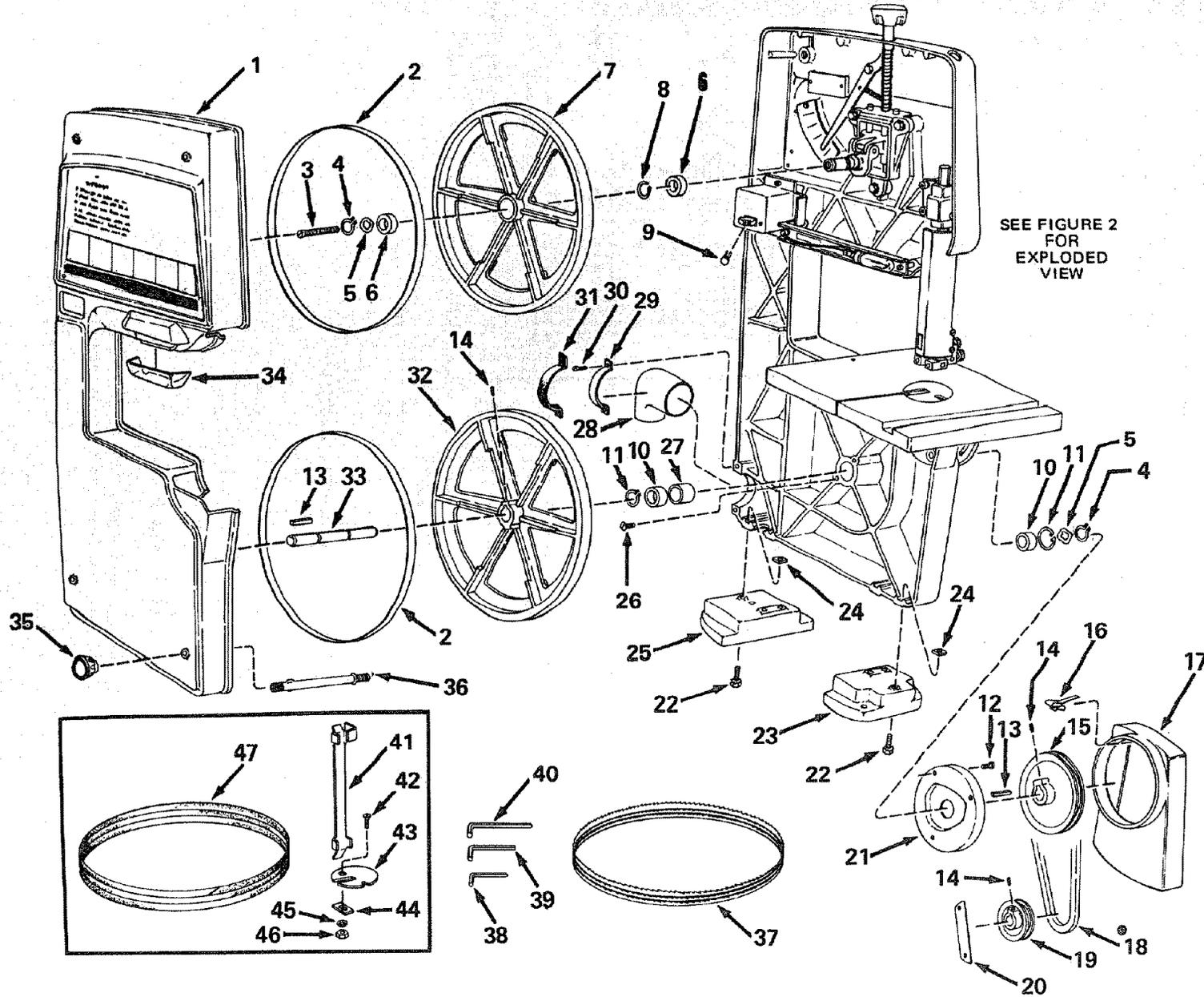
RECOMMENDED ACCESSORIES

Item	Cat. No.
Floor Base	9-22213
Miter Gauge	9-29929
Hold-Down Clamp For Miter Gauge	9-29928
Stop-Rods For Miter Gauge	9-29924
Rip Fence	9-23432
Blades and Sanding Belts	See Catalog

The above recommended accessories are current and were available at the time this manual was printed.

CRAFTSMAN 12-INCH BAND SAW/SANDER, MODEL 113.24201

repair parts



CRAFTSMAN 12-INCH BAND SAW/SANDER, MODEL 113.24201

All parts illustrated in Figures 1 and 2 and listed under part numbers may be ordered through any Sears Retail Store or Catalog Order House. Order parts by mail from the Catalog Order House that serves the territory in which you live. In several instances, part numbers are listed for COMPLETE ASSEMBLIES. All parts are shipped prepaid within the limits of the Continental United States.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION AS SHOWN ON THE LIST:

- | | |
|--------------------|---|
| 1. THE PART NUMBER | 3. THE MODEL NUMBER 113.24201 |
| 2. THE PART NAME | 4. THE NAME OF ITEM – 12-INCH BAND SAW/SANDER |

Always order by Part Number – not by Key Number

FIGURE 1 PARTS LIST

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	69069	Cover, Frame with Trim	25	69053	Foot, Left
2	41815	Tire	26	STD522503	*Screw Mach., 1/4-20 x 3/8, Truss Hd., Slotted.
3	38524	Screw, Self-Locking	27	69023	Spacer, Bearing
4	37158	Ring, Retaining 5/8	28	65013	Elbow
5	41711	Washer, Spring	29	69004	Clamp, Tube
6	STD315228	Bearing, Ball	30	STD601103	*Screw, Mach., 10-32 x 3/8, Pan Hd.
7	69028	Wheel, Upper Drive	31	69078	Gasket, Foam
8	41812	Ring Internal Retaining 1-3/8	32	69059	Wheel, Lower Drive
9	60256	Key, Switch	33	69058	Shaft, Lower Wheel
10	60251	Bearing, Ball	34	69025	Lens
11	38884	Ring, Internal Retaining 1-11/16	35	69006	Knob Assembly 1"
12	STD601105	*Screw Type 23, 10-32 x 1/2, Pan Hd.	36	69060	Stud, Cover
13	30789	Key, Square 3/16 x 1-1/4	37	60272	†Blade, Band Saw, 1/4 x 80
14	STD503105	*Screw, Set, 5/16-18 x 1/2, Soc. Hd., Cup Pt.	38	37887	†Wrench, Hex., "L", 1/8
15	38450	†Pulley, 1/2 V Groove, 5" x 5/8 Bore, Keyed with Set Screw	39	60096	†Wrench, Hex., "L", 5/32
16	60255	Clip, "S"	40	37911	†Wrench, Hex., "L", 3/16
17	60252	Guard, Belt	41	69062	Platen, Sanding
18	STD304430	•†Belt, V Type, 1/2 x 43	42	133427	*Screw, Mach., 6-32 x 7/16, Flat Hd.
18	STD304520	†Belt "V" Type, 1/2 x 52	43	69063	Insert, Table (Sanding)
19	30646	†Pulley, 1/2 V Groove, 2-1/2" x 5/8 Bore, Keyed with Set Screw	44	69005	Plate, Sanding Alignment
20	60254	Bracket, Support	45	STD551106	*Lockwasher, No. 6
21	60253	Support, Belt Guard	46	STD541006	*Nut, Hex., 6-32
22	425338	*Screw, 5/16-18 x 1, Sems, Hex, Hd.	47	69037	†Belt, Sanding, 1/2 x 80
23	69052	Foot, Right		69079	Owner's Manual (Not Illustrated)
24	STD541031	*Nut, Square, 5/16-18		69081	Bag Asm. Loose Parts (Not Illustrated)
				69083	Bag Asm. Loose Parts (Not Illustrated)

*Standard Hardware Item – May Be Purchased Locally.

†Stock Item – May be secured through the Hardware Department of most Sears or Simpsons-Sears Retail Stores or Catalog Order Houses.

NOTE: Shipping and handling charges for standard hardware items (identified by *) such as nuts, screws, washers, etc., make buying these items by mail uneconomical. To avoid shipping and handling charges, you may obtain most of these locally.

• Supplied In Canada Only.

CRAFTSMAN 12-INCH BAND SAW/SANDER, MODEL 113.24201

repair parts

FOR WIRING DIAGRAM
SEE PAGE 26

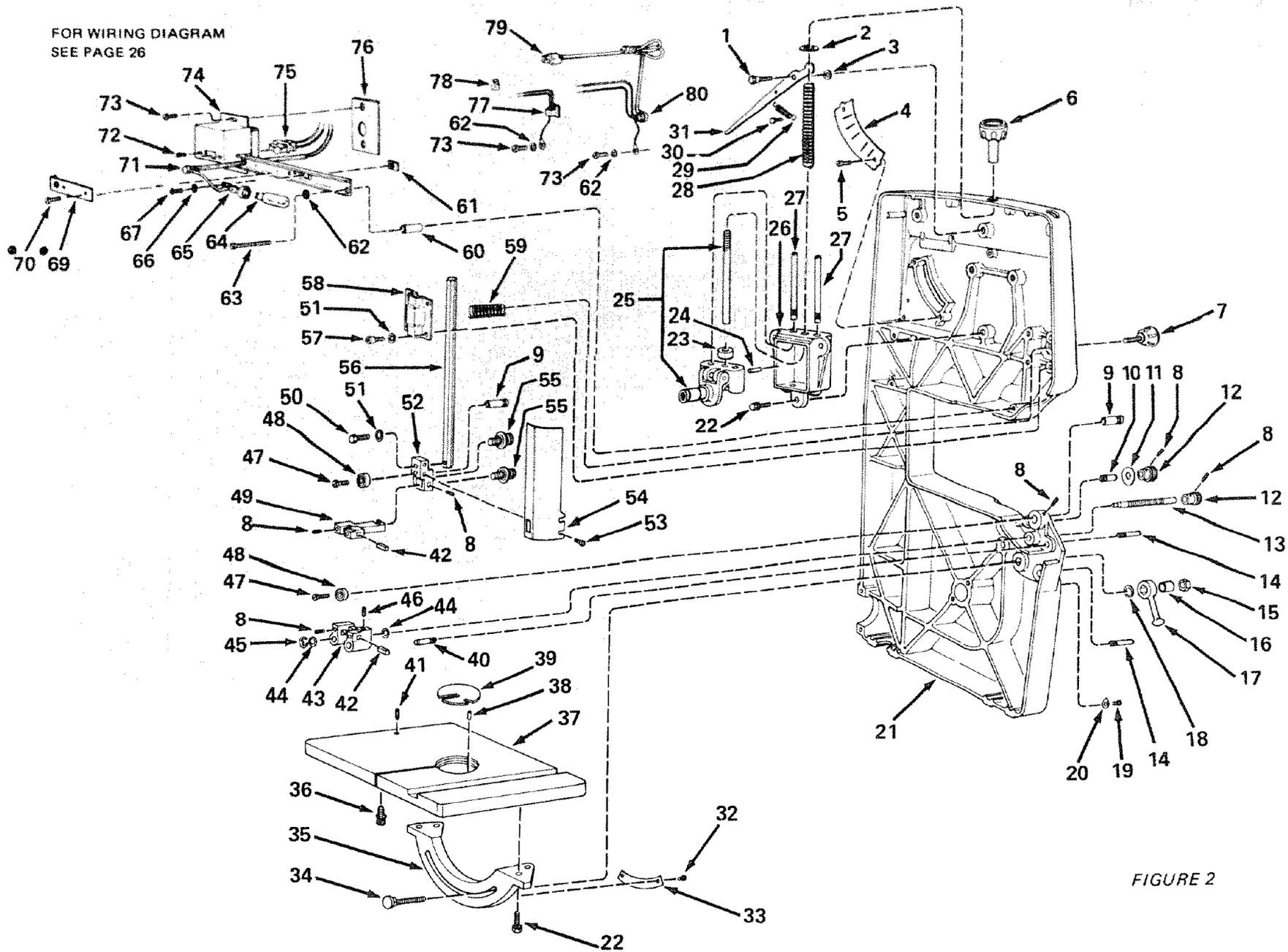


FIGURE 2

CRAFTSMAN 12-INCH BAND SAW/SANDER, MODEL 113.24201

FIGURE 2 PARTS LIST

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	69017	Pin, Pointer Pivot	42	69039	Guide, Blade
2	STD551050	Washer, Plain, 1/2 x 1-1/4 x 1/8,	43	69045	Guide, Lower Blade
3	STD551012	Washer, Plain, 17/64 x 1/2 x 1/16	44	STD551031	Washer, Plain, 5/16 x 9/16 x 1/16
4	69073	Scale, Tension	45	38825	Ring, Retaining, 5/16
5	9423400	*Screw, Type 23, 1/4-20 x 3/8 Pan Hd.	46	STD502505	Screw, Set, 1/4-20 x 3/4, Soc. Hd., Fl. Pt.
6	69031	Knob Assy., Tension Adjustment	47	STD522505	*Screw, Mach., 1/4-20 x 1/2, Pan Hd.
7	69033	Knob Assy., 1-1/2"	48	STD315505	Bearing, Ball
8	STD502502	*Screw, Set, 1/4-20 x 1/4 Soc. Hd., Fl. Pt.	49	69038	Guide, Upper Blade
9	69042	Sleeve, Thrust Bearing	50	STD522507	*Screw, Mach., 1/4-20 x 7/8, Hex. Hd.
10	69046	Screw, Thrust Adjustment	51	STD551125	*Lockwasher, 1/4
11	69047	Washer, 1/4 x 1-13/32 x 1/16	52	69041	Support, Upper Blade
12	69048	Knob, Lower Guide	53	STD601103	*Screw, Type 23, 10-32 x 5/16, Pan Hd.
13	69049	Screw, Guide Adjustment	54	69044	Guard
14	69021	Pin, Trunnion	55	69043	Knob Upper Guide
15	STD541037	Nut, Hex. 3/8-16	56	69035	Bar, Guide
16	69077	Spacer	57	216278	*Screw, Cap, 1/4-20 x 1/2, Socket, Hd.
17	69072	Wrench	58	69036	Support, Guide Bar
18	STD551037	Washer, Plain, 3/8 x 1-1/8 x 7/64	59	69034	Spring, Guide Bar
19	STD600802	*Screw, Type 23, 8-32 x 1/4, Pan Hd.	60	69012	Spacer
20	38724	Pointer, Tilt	61	37393	Nut, Speed
21	69070	Frame Assy., W/Trim (Incl. Key Nos. 14 & 40)	62	STD551225	*Lockwasher, External Tooth 1/4
22	453068	*Screw, 5/16-18 x 3/4, Sems. Hex. Hd.	63	STD522512	*Screw, Mach., 1/4-20 x 1-1/4, Pan Hd.
23	69029	Bumper, Upper Wheel	64	STD372252	*Bulb, Light 115/125V, 25 Watt, Dbl. contact, Bayonet Base, Appliance
24	38876	Pin Roll 1/4 x 3/4	65	69014	Socket, Light
25	69068	Guide Assy., Fulcrum (includes Key No. 24)	66	STD551208	Lockwasher No. 8
26	41426	Bracket, Upper Wheel Support	67	STD510802	Screw Mach., Pan Hd. 8-32 x 1/4
27	69022	Rod, Upper Wheel Guide	69	69066	● Guard, Wire
28	69019	Spring, Wheel Tension	70	STD600803	● Screw, Type 23, Pan Hd., No. 8-32 x 3/8"
29	69018	Spring, Pointer	71	69009	Relief, Strain
30	273229	Screw, Tapping, 1/4-20 x 1/2, Hex Washer Hd.	72	60287	*Screw, Nylon., 6-32 x 3/8, Pan Hd.,
31	69016	Pointer	73	447845	*Screw, Type T, 1/4-20 x 1/2, Pan Hd.
32	STD600602	*Screw, Type 23, 6-32 x 1/4, Pan Hd.	74	69010	Box Assy., Switch
33	69056	Scale Tilt	75	60257	Switch, Locking
34	STD533725	*Bolt, Carriage, 3/8-16 x 2-1/2	76	69082	Gasket, Switch Box
35	69057	Trunnion	77	69027	Outlet Assembly
36	38794	Screw, Knurled	78	71046	*Connector, Wire, 14-18
37	69074	Table	79	69026	Cord Assembly
38	STD571203	Pin, Roll 1/8 x 5/16	80	37875	Relief, Strain
39	69055	Insert Table			
40	69024	Pin, Lower Guide Support			
41	60190	Screw, Self-Locking, 5/16-18 x 3/8			

*Standard Hardware Item -- May Be Purchased Locally.

†Stock Item -- May be secured through the Hardware Department of most Sears or Simpsons-Sears Retail Stores or Catalog Order Houses.

●Supplied in Canada only.

Sears

*owners
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**MODEL NO.
113.24201**

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How to ORDER Repair Parts

The Model Number will be found on a plate attached to your saw, at the left-hand side of the base. Always mention the Model Number when requesting service or repair parts for your CRAFTSMAN 12-INCH BAND SAW/SANDER.

All parts listed herein may be ordered through SEARS, ROEBUCK AND CO. or SIMPSONS-SEARS LIMITED. When ordering parts by mail, selling prices will be furnished on request or parts will be shipped at prevailing prices and you will be billed accordingly.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION AS SHOWN IN THIS LIST.

- | | |
|----------------------------------|---|
| 1. The PART NUMBER | 2. The PART DESCRIPTION |
| 3. The MODEL NUMBER
113.24201 | 4. The NAME OF ITEM –
CRAFTSMAN 12-INCH
BAND SAW/SANDER |

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